**Step 2: Select the parameter**

- This screen allows users to select the sensor parameters for monitoring. For a vibrating wire sensor, choose FREQ (Frequency) in Hz, and for temperature sensors, select TEMP (Temperature) in deg C. After selecting the required parameters, tap Save & Next to proceed. Repeat this process for each channel you will be using for vibrating wire measurements. Once you have confirmed the parameter and unit for all desired vibrating wire channels, you can proceed to the next step.

(Single Channel)   (Multiple channel)
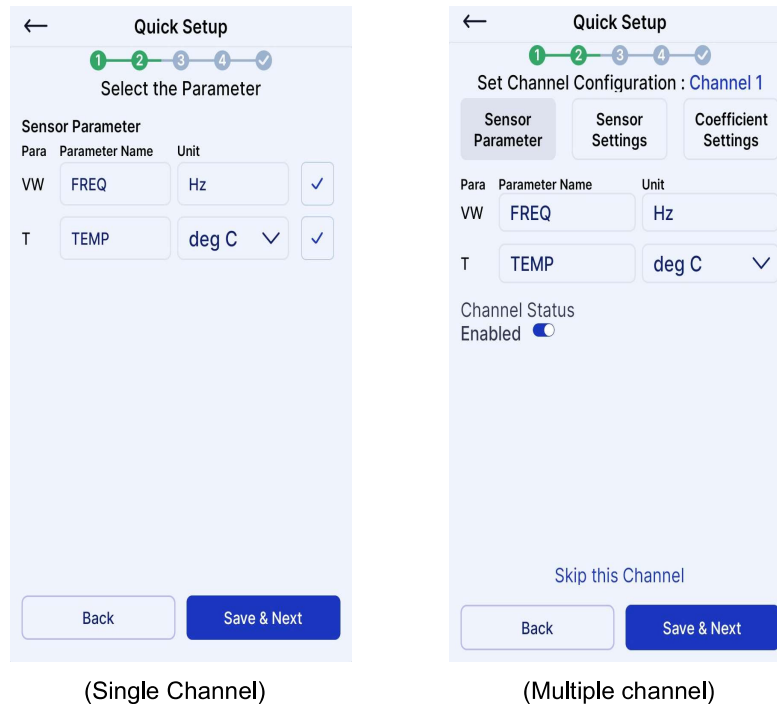
Figure 5-13

Step 3: Set the Sensor Settings

- This screen allows users to configure specific settings for the connected sensor. Enter the Sensor ID, Sensor Manufacturer, and Sensor Model. Provide the Sensor Serial No. and any relevant Sensor Comments. Set the Number of Steps, Pulse for Average, Start Frequency (Hz), and End Frequency (Hz) as required for the sensor's operation. Repeat this process for each channel you will be using for vibrating wire measurements. Once you have confirmed the parameter and unit for all desired vibrating wire channels, you can proceed to the next step. Once done, tap Save & Next to proceed.

(Single Channel)   (Multiple channel)

Figure 5-14

Step 4: Set the Coefficient

- This screen allows users to input the coefficients for the sensor's calculation formula. Enter the values for Coefficient A0, A1, A2, A3, A4, and A5 based on the sensor's specifications. These coefficients are used in the equation:
  $P = A0 + A1 \cdot f + A2 \cdot f^2 + A3 \cdot f^3 + A4 \cdot f^4 + A5 \cdot f^5$, where f represents the frequency.

- Additionally, set the Thermistor value, typically 3K at 25°C. After entering the required data, tap Save & Next to proceed. Repeat this process for each channel you will be using for vibrating wire measurements.

(Single Channel)   (Multiple channel)

Figure 5-15

Test Sensor Reading

- In this step, user can test the sensor readings for FREQ (Frequency) and TEMP (Temperature). The last read values for each parameter will be displayed, along with Noise and Period. Tap Take Reading to get real-time data from the sensor. Ensure the Noise remains below Max 1 Hz for accurate readings. If needed, you can also adjust Advanced Settings. Once the test is complete, tap Back or Save & Next to proceed.
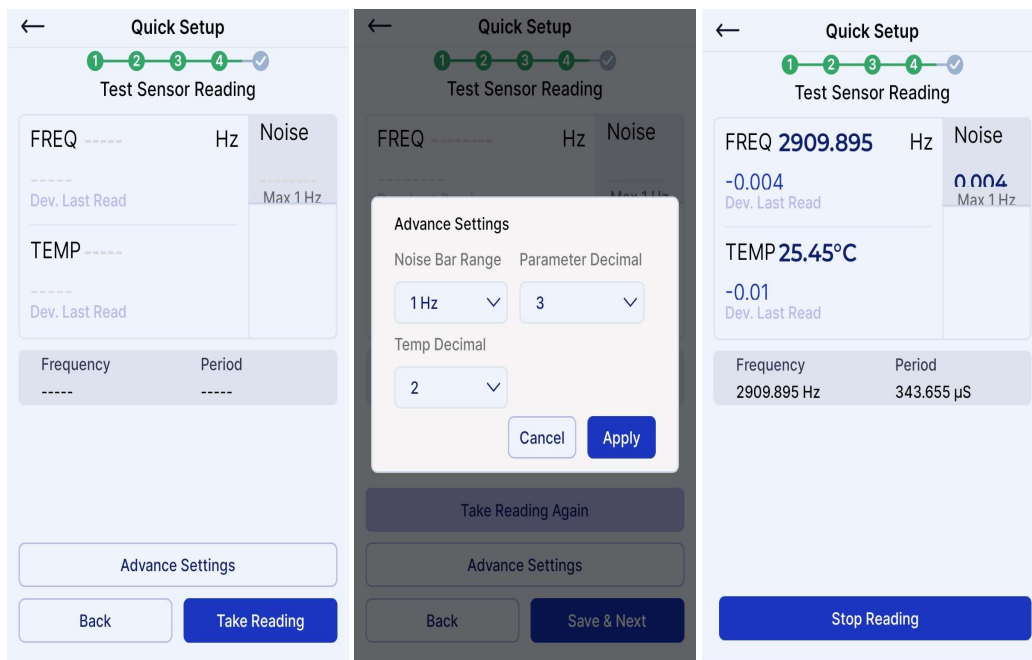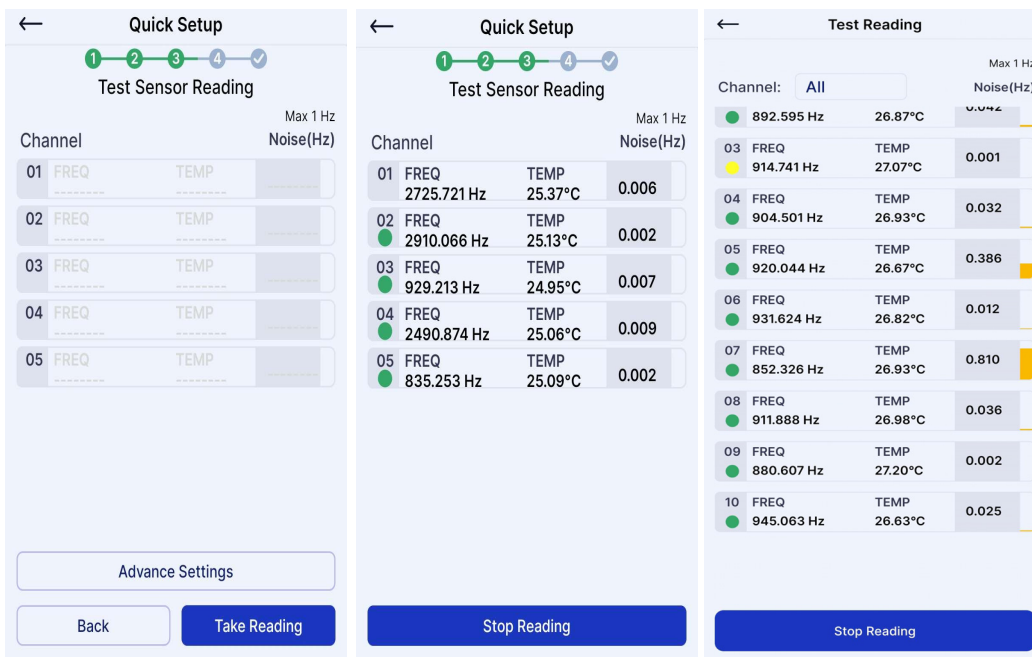

Figure 5-16 (Single channel)

Figure 5-17 (Multiple channel)

Test Hub & VibraLink Connection

- In this step, users can test the connection between the VibraLink Solo and the Hub. The Network ID, Frequency, and Tx Power are displayed. The screen shows real-time data for RSSI, dBm, and µW for both the VibraLink Solo and Hub.

- To start the test, tap Start Test. The Test Packet Status will show the number of received packets and the pass/fail percentage. If the connection is successful, user will see GOOD to Go!. Once the test is complete, tap Stop Test to end the process.
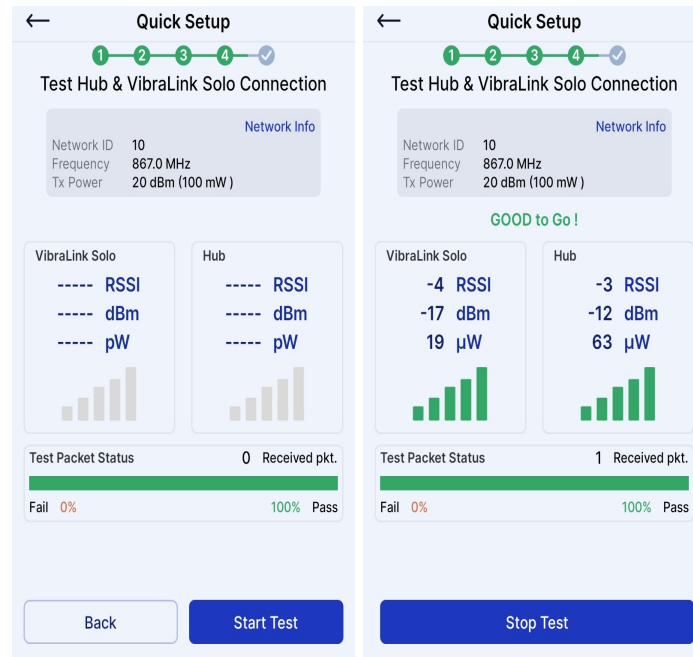

Figure 5-18

Test Hub & Vibralink Connection (Register) screen

- After successfully testing the connection, tap **Register With Hub** to register the **VibraLink** node with the Hub. A progress bar will appear, showing the registration process. Once completed, user will see a **Node has been registered to Gateway successfully!!** message indicating that the node is successfully connected to the gateway.

- If needed, you can tap **Test Again** to re-run the connection test or **Cancel** to exit. The **Test Packet Status** will show real-time data for the connection, including received packets and pass/fail status.
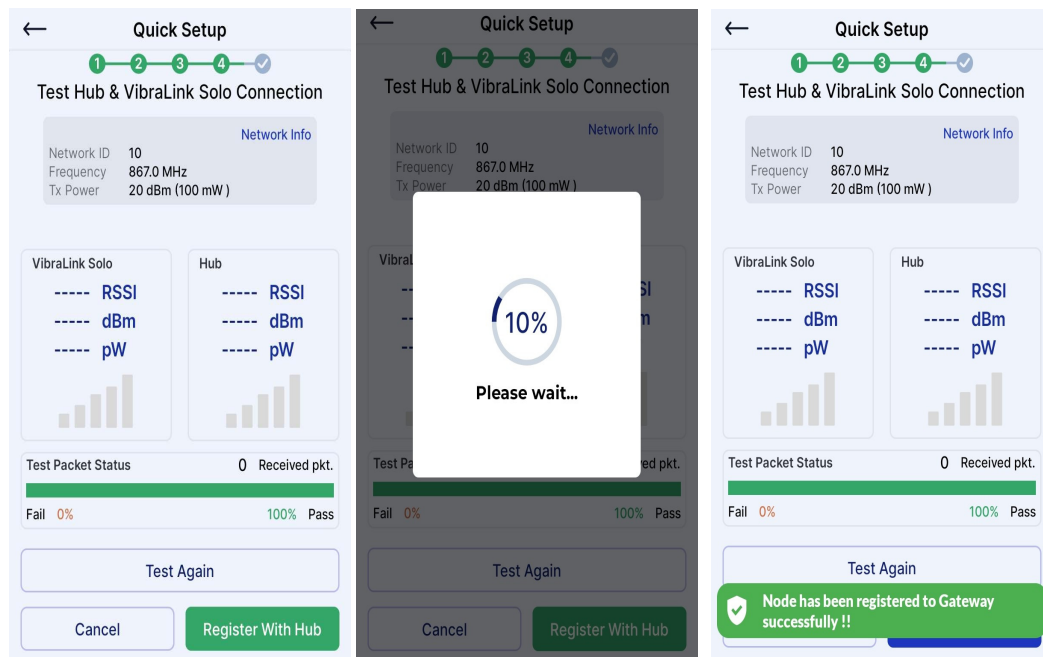
Figure 5-19

Finish setup

- Once the **Test Hub & VibraLink Solo Connection** is successfully completed, tap **Finish Setup** to finalize the configuration. This will complete the process of connecting the node to the network. User will see a **Setup Complete** message confirming that the node has been successfully set up.

- If user'd like to set up another device, tap **Setup Another Device**. To return to the home screen, tap **Back to the Setup Home**.
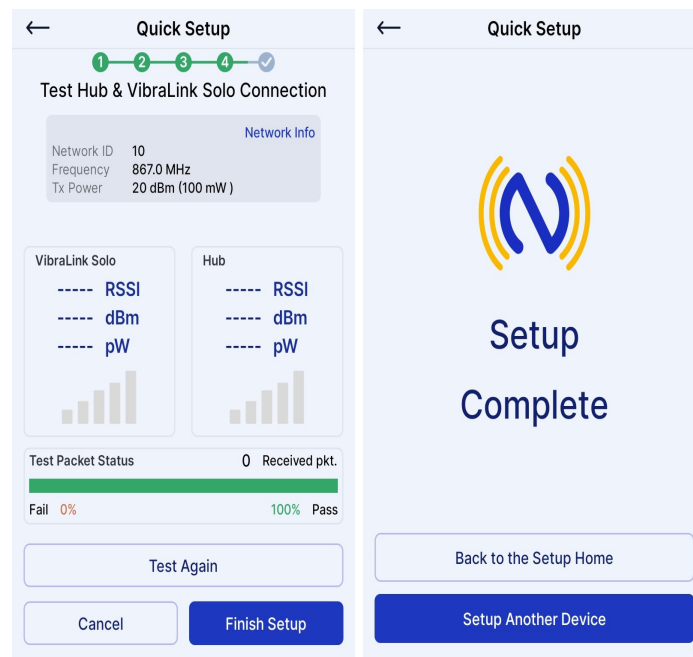

Figure 5-20

5.4.2   Configuring Sensor's Coefficients and information

- To modify the **VibraLink Solo** settings after the initial or quick setup, tap **Edit Configuration** on the main screen to configure the sensor's parameters like model, coefficients, sensor serial number, sensor tag etc.
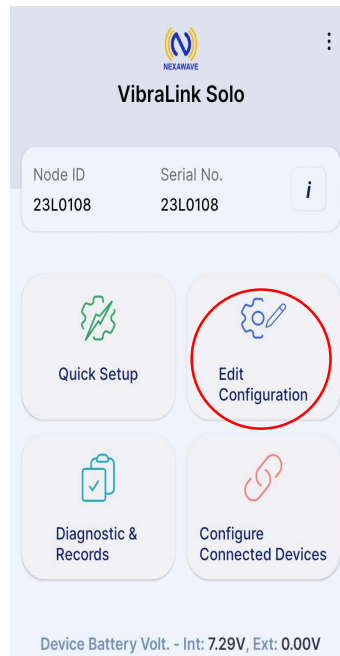

Figure 5-21

- After clicking **Edit**, users can modify several configuration settings for the **VibraLink Solo** node. This includes updating the **VibraLink Solo ID**, **Installation Date**, and **Relay Hopes** (e.g., selecting **No Relay**). You can also adjust the **Frequency Plan** (e.g., **IN865-868 (867.0)**), change the **Network ID**, and update the **Location** by modifying the **Latitude** and **Longitude** values. Additionally, the **Device Date & Time** can be corrected for accurate data logging. After making the necessary adjustments, tap **Save** to apply the changes or **Cancel** to discard them.
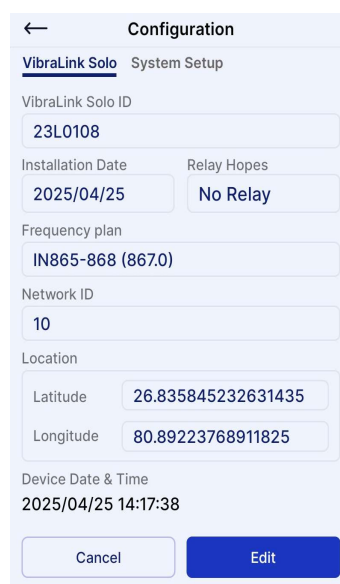

Figure 5-22

■ After selecting Edit Configuration, user can configure the Channel settings for the VibraLink node. Choose the Sensor Parameter (e.g., VW (Frequency) in Hz and TEMP (Temperature) in °C) to specify the parameters you wish to monitor. The Channel Status (in multi-channel node) can be toggled to Enabled or Disabled based on your setup requirements. To customize the Sensor Settings, tap the Sensor Settings button. Once all the changes are made, tap **Save** to apply the new settings or **Cancel** to discard them.
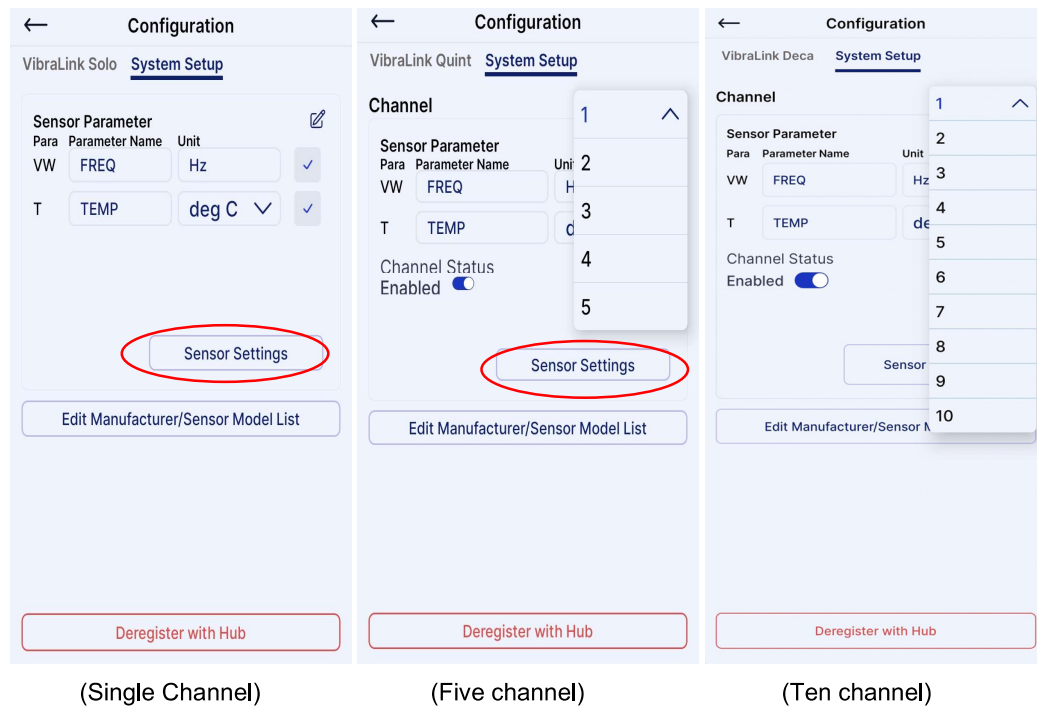

| (Single Channel) | (Five channel) | (Ten channel) |

Figure 5-23

■ When user tap **Edit Manufacturer/Sensor Model List**, user can add or remove manufacturers and sensor models associated with the **VibraLink Quint** node. To add a new sensor model, select the **Add** option, enter the **Manufacturer** name, and specify the **Sensor Model** details. User can also set the **Thermistor** value (e.g., **3K at 25°C**), and define the **Start Frequency (Hz)**, **End Frequency (Hz)**, and the **Number of Steps**. After filling in the required fields, tap **Add** to save the changes.

■ If you wish to remove a manufacturer or sensor model, select the **Remove** option and proceed accordingly.

■ Once done, tap **Save** to apply the changes.